



FRIDGE/FREEZER



60 Litre

USER MANUAL



WARNING



Read user manual before operating you fridge/freezer 12/24v DC & 220-240v AC Fridge Freezer. For different operating voltage you must use a different suitable transformer - Contact Dobinsons



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Product Details:

- *Danfoss compressor - The most reliable and efficient cooling system in the world*
- *The best electronic technology, high efficiency, low energy consumption*
- *Multi-voltage system (DC 12-24 Volt) and (AC 220-240 Volt)*
- *Battery protection/low voltage cutout, protect your vehicle battery efficiently*

Safety Instructions:



WARNING: Do not touch exposed cables with your bare hands, especially when operating the appliance when connected to an AC power supply. It is also dangerous to touch the plug when your hand is wet.

When using the fridge/freezer in a vehicle or boat, please make sure the electricity supply has a fuse if using the main power. The installation of the DC power source in the vehicle or boat should be handled by the qualified personnel.

Make sure the voltage supply is correct.

Do not place any electrical devices inside the fridge/freezer.

The fridge/freezer can be quite awkward to lift and can be quite heavy if full. It is recommended that you only lift the fridge if you are comfortable with the weight, otherwise seek assistance from another person.

Children should not play with or near the appliance at any times.

The fridge/freezer should not be exposed to rain.

The fridge freezer has been designed to operate on angles up to 35 degrees however it should not operate at angles of more than 30 degrees for more than 4 hours.

PRODUCT USAGE & REQUIREMENTS

General Product Usage and Requirements.

Ventilation:

Your fridge/freezer requires good ventilation, especially around the back of the fridge/freezer to allow the motor to operate correctly; allow a gap of at least 200mm around the back and 100mm around the sides. Failure to do this may damage the fridge and void warranty.

Humidity:

Where possible try to avoid high levels of humidity inside the appliance. Leaving the fridge/freezer open for extended periods of time when operating should be avoided as this can generate humidity which can frost on the fridge walls impairing cooling. Therefore, it is recommended to defrost the fridge before this happens. Never clean the appliance under running water or in dish water.

Heat Sources:

Avoid placing your fridge/freezer near heat sources, and where possible store your fridge/freezer in a shaded area out of the direct sunlight. This will allow the fridge/freezer to operate more efficiently and also consume less power from the power supply.

Vehicles:

When using the fridge/freezer in vehicles the fridge/freezer should always be secured as per your country/state/territory requirements for securing objects in vehicles. The fridge should also be secured sufficiently when it is placed inside the vehicle to prevent the fridge dislodging in the case of an accident/emergency. The fridge can be secured using the fridges handles on each end of the fridge; however do not over tighten the tie down straps as it may cause damage.

The fridge/freezer should also be secured on a flat surface and in a way that minimizes vibration to prevent damage to the fridge/freezer and allow efficient operation.

It is recommended where possible that when being used on a vehicle the fridge be wired to an auxiliary battery as to prevent the main cranking/starting battery from draining.

Note: It is recommended that a Dobinsons fridge/freezer protector bag be utilized in conjunction with your Dobinsons fridge/freezer to maximize efficiency and life span.

Power Supply Cable Length Specification:

The DC cables must have a suitable cross-section for their length, according to this table:

| Cable Area | | 12V Max Cable Length | | 24V Max Cable Length | |
|--------------------|-----|----------------------|-------|----------------------|-------|
| [mm ²] | AWG | [m] | [ft.] | [m] | [ft.] |
| 2.5 | 12 | < 2.5 | < 8 | < 5 | < 16 |
| 4 | 12 | < 4 | < 13 | < 8 | < 26 |
| 6 | 10 | < 6 | < 20 | < 12 | < 39 |
| 10 | 8 | < 10 | < 33 | < 20 | < 66 |

* The length is from the battery to the fridge/freezer.

AC Max Cable Size : 0.75mm² or 18AWG

OPERATION

Operation

Power Supply:

The 12/24V and AC power can both be present at the same time. The fridge/freezer will always set itself on AC power priority feeding by 220-240V if both power supplies are connected. If using in countries different from Australia that do not use 220-240v AC please use the suitable AC transformer for your voltage. This electronic device can control the compressor system and have the function of battery protection/Low voltage cutout. When the input voltage drops to the set CUT-OUT voltage as entered by the user, it can stop the compressor; when the voltage returns to the value, the compressor will re-start automatically. Dobinsons recommend that the fridge/freezer be connected to an auxillary battery where possible to prevent draining the starting battery.

DC Battery Protection/Low Voltage Cutout:

Note: This feature does not adjust the compressor output or cooling performance of the fridge/freezer.

Your Dobinsons fridge/freezer is fitted with a battery protection/low voltage cutout feature that will protect the battery/power source from losing to much voltage when the fridge is connected. This is especially important when the fridge is being used in a vehicle or boat as it will protect the battery from losing too much voltage especially when connected to the vehicle starting battery. This can be set between 10v and 11.5v DC.

To adjust the voltage cut out first hold down the SET button for a few seconds until the voltage display flashes. Use the UP and DOWN arrows to adjust the cut out voltage. The voltage display will then return to the input voltage reading after 10 seconds. Repeat this process to re adjust.

If the input/battery voltage falls below the entered value then there will be an audible BEEP and the small battery symbol will flash. The fridge/freezer will automatically begin operating again once the input voltage returns above the set value.

Note: It is strongly recommended that if the fridge/freezer is connected to the vehicles main cranking/starting battery that the voltage cut out is set to 11.5v and that the battery voltage is monitored regularly to prevent the cranking/starting draining to far and having insufficient voltage to restart the vehicle. Check with your battery manufacturer as depending on the type of battery being used and the condition of the batter, 0% state of charge on a 12 volt battery can be as high as 11.8v.

Setting the Temperature:

To set the temperature first press the SET button then use the up and down arrows to adjust the temperature. The right hand temperature display will display the temperature you have set.

OPERATION

Eco/Max Mode Setting:

Your Dobinsons fridge/freezer is equipped with an ECO and MAX running mode setting that allows the fridge/freezer to operate more efficiently.

MAX Setting: This setting will reduce the internal temperature of the fridge/freezer faster than the ECO setting, however this setting will draw more power. This setting is recommended for when the fridge/freezer is first turned on and should be avoided when the fridge/freezer is being used in vehicles or boats.

❄ Symbol appears when MAX Setting is turned on. To turn fridge/freezer to MAX setting press and hold the DOWN arrow for 3 seconds and the symbol will appear.

ECO Setting: This setting will not reduce the internal temperature quite as fast as the MAX setting; however this setting will reduce the power consumption. This setting is recommended for when the fridge/freezer is already at its desired temperature and is recommended when the fridge/freezer is being used in vehicles or boats.

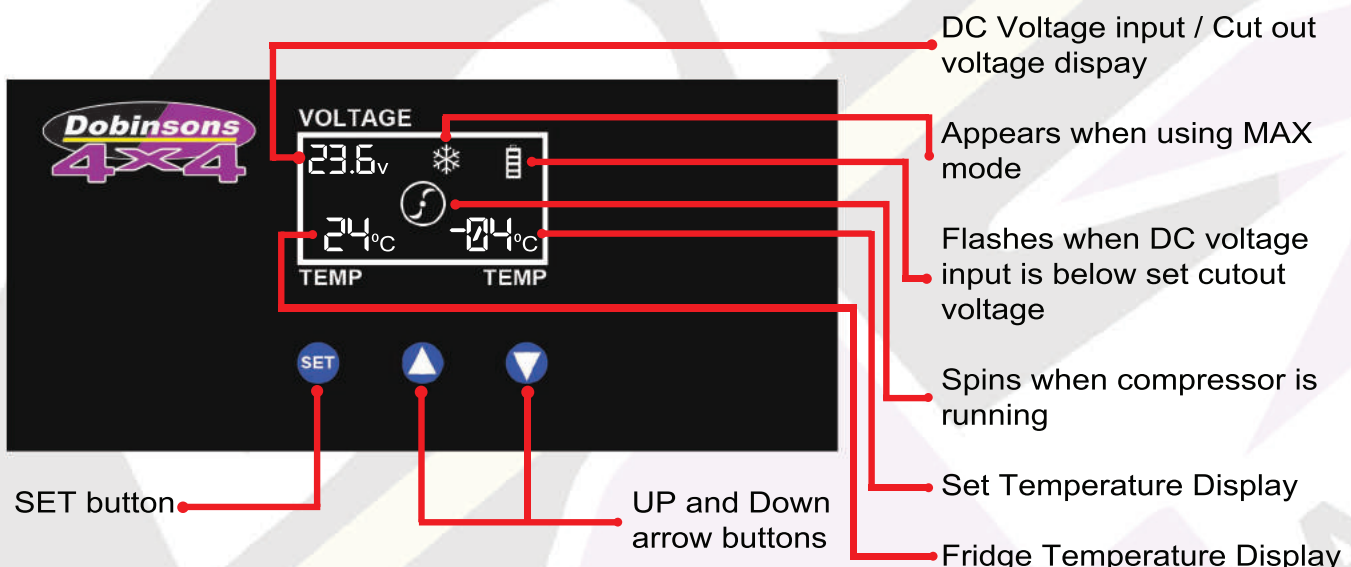
The snowflake symbol will not appear when set to ECO mode. Press and hold the UP arrow for the 3 seconds to return the fridge/freezer to eco mode.

Control Panel Operation:

Press the set button then use the UP and DOWN arrows to adjust the temperature. Press and hold the DOWN arrow for 3 second to enter MAX running mode. Displays ❄

Press and hold the UP arrow for 3 second to return to ECO running mode.

Plug in the DC or AC power supply to turn the fridge on
Press and hold the SET button then use the UP and DOWN arrows to adjust the battery voltage cut out.



OPERATION

General Operating Tips

- It is recommended that if you are planning on taking the fridge/freezer in your vehicle or boat that first you connect the fridge/freezer at home or to an AC power supply a day or 2 before leaving to cool the fridge/freezer and contents. This will avoid thawing of some contents if placed into a fridge/freezer that has just been turned on and will also reduce the power usage on the vehicle/boat battery.
- The fridge/freezer is fitted with an internal basket and divider. This basket will only fit 1 way into the fridge as the mounting legs slide over the fresh goods compartment. If fitting tall bottles in the fridge/freezer the basket can be removed to allow the bottles to sit in the lower recess. It is recommended however that the basket be used where possible. The internal divider can be used to separate beverages from food.
- It is recommended that you do not over load your fridge and that if possible you keep ventilation room between each product. This will allow the fridge/freezer to operate most efficiently, will allow the lid to seal properly and will help prevent hotspots.
- If you are regularly taking beverages from the fridge/freezer and will be re-filling the fridge/freezer with hot/room temperature beverages, it is recommended that you replace the beverages from the fridge/freezer with your room temperature beverages as often as you remove them or as often as possible, rather than emptying the fridge/freezer and replacing with a large quantities of room temperature beverages. This will allow the fridge/freezer to operate more efficiently, will reduce power consumption, will, prevent the room temperature beverages lowering the temperature of the other contents, will help to prevent humidity build up in the fridge and will also ensure a constant supply of cold beverages/contents.
- Your Dobinsons fridge/freezer is equipped with an internal fresh goods compartment at the rear at the top. This compartment generally is a few degrees warmer than the main fridge compartment and is recommended that this compartment be used to store things like fruit and vegetables that may not need to be as cool as the other items in the main compartment. This compartment will also keep these items dry in case of a spillage in the main compartment.
- Where possible stand canned & bottled beverages upright.

CLEANING & MAINTENANCE

Cleaning and maintenance

Clean the appliance inside and out with a damp cloth. If it is dirty, use sodium bicarbonate dissolved in lukewarm water, and then clean it.

Never use abrasive products, detergents or soap. After washing, rinse with clean water and dry carefully. Do not leave the fridge/freezer shut off, warm inside, with food inside or lid closed. When in storage leave the lid ajar slightly to prevent mould build up inside the fridge/freezer.

Never clean the appliance under running water or in dish water. Do not use abrasive cleaning agents or hard objects during cleaning as these can damage the fridge/freezer.

Defrosting

When defrosting the fridge/freezer do not use sharp objects. Turn the fridge/freezer off and allow the ice to melt. Drain the ice from the cabinet and then use a soft clean towel to wipe down clean and allow to dry.

TROUBLE SHOOTING

Troubleshooting

Your Dobinsons Fridge/Freezer has a 5 year conditional warranty on the compressor and a 1 year warranty on all other parts.

| Problem | Possible Cause | Solution |
|--|--|--|
| The fridge/freezer will not operate/cool | Check the power supply | Test another appliance on the power supply or have a qualified electrician/auto electrician check the power supply. |
| | Check the power cable and the socket have a good connection | Check that the power cable is connected securely at both ends. You can try the cable in another power socket. |
| | Check that the power cable is not damaged. | Remove the power cable from both the fridge and power supply first and inspect for damage or have a qualified electrician/auto electrician test the power cable. |
| | Check the fuse is still functional and has not been burnt out | Hold the fuse to the light to see if the centre fuse metal has been burnt out or have a qualified electrician/auto electrician test the power cable. |
| | Check the appliance has been turned on | Press the power button to see if the appliance has not been turned on. |
| | The fridge freezer battery protection/low voltage protection is set to high for the power supply or the power supply is to low | Check the power supply voltage or adjust the switch to allow the fridge/freezer to operate again. |
| The contents inside are frozen | The setting temperature is too low | Increase the temperate setting use the Δ (up) button on the control panel. |
| | If used in areas where the ambient temperature reaches to 0°C it may cause the fridge/freezer contents to freeze up. | Move the fridge to an area that is warmer or if unable try to move the fridge to a covered area. |

TROUBLE SHOOTING

| Problem | Possible Cause | Solution |
|--|--|--|
| Poor Cooling Performance | Has too much room temperature contents been placed inside the fridge/freezer at once. | See general operating tips for tips on loading the fridge/freezer more efficiently. |
| | The door is not latched down properly. | Check the door latches down properly and the fridge is not overloaded preventing the door from closing. |
| | The door seal is broken | Inspect the door seal for damage. |
| | Insufficient ventilation around the fridge | Check that there is sufficient ventilation around the fridge as per the requirements outlined in Ventilation section of this manual and move the fridge/freezer to suit. |
| | The fridge/freezer is too close to a heat source | Move the fridge/freezer away from the heat source. |
| | The fridge/freezer is in direct sunlight | Move the fridge freezer to the shade. |
| | The temperature setting is inappropriate | Lower the temperature setting. |
| | The fridge/freezer is being accessed to regularly or the door is being left open for long periods of time | Avoid opening the fridge/freezer as much as possible and close the door as soon as possible. |
| | The DC power supply voltage is too low and is too close to the voltage cut out point causing the fridge/freezer to cut in and out. | Adjust the switch on the battery protection switch and check the power supply voltage. |
| | The ambient temperature is extremely high. | |
| Hear the sound of running water from inside the fridge/freezer | It's normal, due to the flow of the refrigerant | |
| Noise | The fridge/freezer is not placed on a level surface | Move the fridge/freezer to a flat level surface |
| | The fridge/freezer is touching a wall or another surface | Move the fridge/freezer |
| | There are loose items inside the fridge/freezer compartment | Relocate the fridge contents |

TECHNICAL DATA

Packing List

| Item | Ice Box | Connection Cable AC* | Connection Cable DC | DC Fuse | User's guide |
|-----------|---------|----------------------|---------------------|---------|--------------|
| FF80-3960 | 1 | 1 | 1 | 1 | 1 |

*Countries outside of Australia require different connection cable.

Technical Data (DC/AC)

| FF80-3960 – 60 LITRE | |
|---------------------------------------|-----------------------------|
| ZONE | Single Zone |
| RATED VOLTAGE AC | 220-240V~ |
| RATED FREQUENCY AC | 50/60 HZ |
| RATED VOLTAGE DC | 12V – 24V |
| TOTAL INPUT POWER | 60 Watts |
| RATED CURRENT FOR AC @ 240 VOLTS | 0.25A |
| RATED CURRENT FOR DC @ 12 VOLTS | 5.0A |
| RATED CURRENT FOR DC @ 24 VOLTS | 2.5A |
| OUTSIDE DIMENSIONS | 690 (L) x 490 (W) x 560 (H) |
| REFRIGERANT | R134a (75g) |
| NET WEIGHT | 26kg |
| PROTECTIVE INSULATED FRIDGE BAG COVER | Part Number: FF80-3961 |



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